



# FEMA

## New Orleans TV Station Designs for Worst-Case Scenario

**Gretna, LA** – WWL-TV is a dominant force in the southeast Louisiana area broadcasting industry and is the recipient of several prestigious awards. During Hurricane Katrina, they overcame tremendous challenges and enhanced their reputation by broadcasting continuously and providing communities with ongoing disaster news coverage. No other New Orleans TV station was able to provide non-stop reporting during the hurricane and its aftermath.

The WWL-TV transmitting facility and the adjacent TV tower are located on Cooper Road in Gretna, Louisiana, on the West Bank. Approximately five years ago, Rick Barber, Director of Technology at WWL-TV, owned by Belo Corporation, consulted the Army Corps of Engineers for advice on incorporating protection from potentially catastrophic storm surges into the design of their new transmitter facility and tower. The station took that advice and hired a structural engineering firm known for its ability to design on Louisiana soil, which is 67% water.

Katrina tested the hurricane-resistant building with winds of more than 120 mph. The design proved its worth as the 4,400 square foot, windowless building and tower went unscathed. Ron Rentfrow, the owner of Broadcast Construction Service, the company that built the facility, says the station was built 16 feet above the ground (higher than local code requirements) with an additional 18-inch space to run cables and drain any collection of storm water. The emergency generator and a 10,000 gallon fuel reserve tank also were elevated, and the structure was built with cast-in-place steel reinforced concrete set on 80-foot deep pilings. The pre-cast, eight-inch thick, steel-reinforced concrete walls with metal connectors were trucked in from Mississippi and welded together. Mr. Rentfrow states that “The building was as strong as you could practically build.”

The 1,000-foot tower adjacent to the transmitter site was built to withstand 180 mph winds. Even though the property is actually outside of a Special Flood Hazard Area (SFHA), the parish requires all structures to be engineered as if located within an SFHA. In order to ensure the efficient operation of its emergency equipment, the station runs weekly testing of the generator and its system under emergency conditions.

During the mandatory evacuation preceding Katrina, the studio staff set up a temporary base of operations in Baton Rouge and sent its signal to the transmitter via two satellite links. Mr. Rentfrow described the French Quarter facility as an old building and explained, “We had begun to design a new studio nearby. When Katrina hit, our corporate partners stopped the process and re-evaluated. I won’t be surprised to see elevation and other hurricane resistant measures incorporated into the new studio because this catastrophic event will happen again.”

Photo Caption 1: Transmitter facility and tower for WWL-TV. Photo Caption 2: Transmitter station and TV tower. Photos courtesy of Rick Barber, Director of Technology at WWL-TV.



Jefferson Parish,  
Louisiana



### Quick Facts

Sector:

**Private**

Cost:

**Amount Not Available**

Primary Activity/Project:

**Building Codes**

Primary Funding:

**Business Owner**